

Applicant : Britton Chance
Serial No. : 09/924,152
Filed : August 7, 2001
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Attorney's Docket No.: 08326-051002

REMARKS

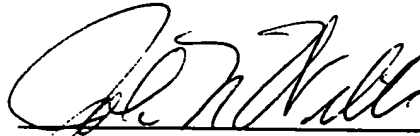
Attached is a marked-up version of the changes being made by the current amendment.

Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date:

Feb 2, 2002



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Version with markings to show changes made

In the claims:

Claims 1-47 have been cancelled.

Please add new claim 48 as follows:

48. A spectroscopic system for imaging biological tissue comprising:
multiple input ports arranged to introduce light at input locations into biological tissue
and multiple detection ports arranged to collect light from detection locations of the biological
tissue,
at least one light source, operatively connected to a radiation pattern controller,
constructed to generate light of a wavelength in a range from visible to infrared, said light source
optically coupled to at least one of said input ports;
at least one detector, operatively connected to said radiation pattern controller,
constructed and arranged to detect light of said wavelength that has migrated in the tissue region
to at least one detection location and corresponding at least one of said detection ports; and
a processor operatively connected to receive detector signals from said detector and
provide an image.

In the abstract:

A spectroscopic method and system for examination of biological tissue includes
multiple input ports optically connected to at least one light source, multiple detection ports
optically connected to at least one detector, a radiation pattern controller coupled to the light
source and detector, and a processor. The multiple input ports are arranged to introduce light at
input locations into biological tissue and the multiple detection ports are arranged to collect light
from detection locations of the biological tissue. The radiation pattern controller is constructed to
control patterns of light introduced from the multiple input ports and constructed to control
detection of light migrating to the multiple detection ports. The processor is operatively
connected to the radiation pattern controller and connected to receive detector signals from the

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detector, and is constructed to examine a tissue region based on the introduced and detected light patterns.